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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,494	06/15/2000	Hisayoshi Usui	13700	1390

23389 7590 04/28/2006

SCULLY SCOTT MURPHY & PRESSER, PC
400 GARDEN CITY PLAZA
SUITE 300
GARDEN CITY, NY 11530

EXAMINER	
BRINEY III, WALTER F	

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 04/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/595,494	USUI, HISAYOSHI	
	Examiner	Art Unit	
	Walter F. Briney III	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15 and 16* is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. **Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushi (US Patent 5,793,250).**

Claims 1-8 are limited to "a digital portable telephone set having demodulating means for demodulating a received signal." The grounds of rejection for these claims remain unchanged from the previous Non-Final Office Action filed 25 November 2005, said grounds being hereby incorporated by reference.

2. **Claims 9-14 are rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art (AAPA)—figures 5 and 7.**

Claim 9 is limited to "a digital portable telephone set having demodulating means for demodulating a received signal." Figure 7 of AAPA depicts a demodulator comprising elements 141, 142 and 144 in combination with a decoder 143. The correcting circuit 144 corresponds to the "correcting means" as recited. See AAPA page 5, lines 1-9 and 21-28, and page 6, lines 1-5. Decoder 143 corresponds to the "decoder" as recited. As noted on AAPA page 4, lines 14-19, the decoder generates received data 133 and "quality data" 133b. The generated "quality data" is inherently generated "on the basis of new frequency data obtained in the correcting means" because of the arrangement depicted in figure 7. AAPA further discloses that the

quality data is used in an AFC, i.e. "used for received signal frequency control." Therefore, AAPA anticipates all limitations of the claim.

Claim 10 is limited in part to "the digital portable telephone set according to claim 9," as covered by AAPA. As noted on page on page 4 of AAPA, the "quality data" 133b is used for frequency deviation detection. In the context of differential quadrature PSK modulation, the upper two bits represent the degree of phase shift, while the least significant bits represent quality data, or the amount of frequency deviation. The so-called frequency deviation corresponds to "received signal frequency data." Therefore, AAPA anticipates all limitations of the claim.

Claim 11 is limited in part to "the digital portable telephone set according to claim 9," as covered by AAPA. Page 4, lines 14-17, indicate that the decoder 143 provides two bits of "received data" 133a. Because correcting circuit 144 feeds the input of the decoder, it is inherent that the decoder 143 "generates received data on the basis of the new frequency data." Therefore, AAPA anticipates all limitations of the claim.

Claim 12 is limited in part to "the digital portable telephone set according to claim 9," as covered by AAPA. Page 4, lines 20-28, of AAPA disclose an AFC unit 104 that "controls the received signal frequency according to the quality data." Therefore, AAPA anticipates all limitations of the claim.

Claim 13 is limited in part to "the digital portable telephone set according to claim 9," as covered by AAPA. As explained on page 5, line 1, through page 6, line 16, the correcting circuit 144 "corrects frequency deviation of the received signal." Therefore, AAPA anticipates all limitations of the claim.

Claim 14 is limited in part to "the digital portable telephone set according to claim 9," as covered by AAPA. As explained on page 4, lines 20-28, of AAPA, "quality data is used as line control data." Therefore, AAPA anticipates all limitations of the claim.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

3. Claims 15 and 16 are allowed.

Claim 15 is allowable for the same reasons presented in the Non-Final Office Action filed 25 November 2005.

Claim 16 is allowable for the reasons presented in the proceeding section entitled *Response to Arguments.*

Response to Arguments

Applicant's arguments filed 03 March 2006 with respect to claims 1-8 have been fully considered but they are not persuasive.

With respect to claim 1, the applicant alleges on page 7, line 13, through page 8, line 18, of the current response that "it is not clear from either the rejection or the reference that the first quality data, second quality data and received data are transferred as demodulated data to a control unit as specifically claimed," to which the examiner respectfully disagrees. In support of this allegation, the applicant notes that "the demodulated data" as it corresponds to the claim language is output from the

phase discriminator 31, and thus, not to control unit 29. See page 8, lines 8-12. Yet, Fukushi discloses that the detectors 17 and 26 generate 6-bits of data. The two most significant bits of data correspond to received data while the lower four bits correspond to quality data. See column 7, lines 38-49. While the phase discriminator 31 provides phase discrimination, the values output by detectors 17 and 26 comprise all the elements of demodulated data disclosed by the applicant on page 4, lines 14-19. As such, no difference between what is shown in the reference and what is claimed can be found.

The applicant further supports the allegation by noting, "at best, only one of the two signals are transferred to the control unit, i.e., 29 and 30." This is inaccurate since comparator 29 clearly includes two inputs from both integrators 19 and 27, which are respectively fed by detectors 17 and 26. Therefore, the rejection of claim 1 is maintained.

With respect to claim 6, the applicant alleges on page 8, line 21, through page 9, line 14, of the current response that Fukushi fails to teach or suggest the features of "the second data generating means including [...] a decoder for generating the second quality data received data [...]," to which the examiner respectfully disagrees. In support of the allegation, the applicant concludes that the subtractor 26b noted by the examiner does not correspond to the recited decoder because "one of ordinary skill in the art would not confuse a subtractor with a decoder." However, page 4, lines 14-19, of the applicant's specification defines a decoder as a device that generates a data word with two upper bits of received data and three lower bits of quality data. Column

7, lines 38-49, of Fukushi discloses that the subtractor 26b of detector 26 produces the same results. As such, no difference between what is shown in the reference and what is claimed can be found. Therefore, the rejection of claim 6 is maintained.

With respect to claim 8, the applicant alleges on page 9, line 16, through page 10, line 7, of the current response that Fukushi fails to teach or suggest the features of "wherein the second quality data is used as line control data," to which the examiner respectfully disagrees. In support of the allegation, the applicant notes that the second quality data is not output from the integrator, but from coherent detector 26, and that the comparison between the first output and the second output is used to drive the switch, not the second quality data. The rejection of this claim was based on a broad interpretation of the claim language. Claim 8 recites, "the second quality data is used as line control data." There is no explanation of how the second quality data is used, simply that it is used in some known fashion. To this extent, the fact that Fukushi discloses using the output of coherent detector 26 in controlling a line is sufficient for a rejection. Therefore, the rejection of claim 8 is maintained.

With respect to claims 2-5 and 7, the rejections of these claims are maintained for the same reasons presented above.

Applicant's arguments filed 03 March 2006 with respect to claims 9-14 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 03 March 2006 with respect to claim 16 have been fully considered and are persuasive. The rejection of claim 16 has been withdrawn.

With respect to claim 16, the applicant alleged on page 10, line 18, through page 11, line 3, of the current response that AAPA only discloses supplying the correction signal to the subtractor and not to the control unit, to which the examiner agrees. Thus, claim 16 is allowable over the cited prior art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WFB

SINH TRAN
SUPERVISORY PATENT EXAMINER